REMARKS

This is in response to the Office Action mailed on July 25, 2006. Claims 1-24 were pending in the application and the Examiner rejected all claims. With this amendment, claims 1, 2, 5-7, 12 and 19 are amended and the remaining claims are unchanged.

On page 2 of the Office Action, the Examiner objected to the drawings requesting textual features or symbols in FIGS. 6A-6D and 8A-8D. Labels have been added and new drawings are submitted herewith.

On page 3 of the Office Action, the Examiner rejected claims 1, 3-4, 7, 9-13, 15-19 and 24 under 35 U.S.C. §101 as being directed to non-statutory subject matter. Applicant has amended claim 1 to include the step of "controlling user access to the data entities based on the links." Therefore, Applicant submits that the claim is now drawn to statutory subject matter. In addition, Applicant has amended claim 19 to include "tree data, on a computer readable medium,..." and "a function to use the tree data to control user access to the business data entities." Therefore, Applicant submits that claim 19 is also drawn to statutory subject matter.

With respect to the rejection of claim 12, Applicant respectfully traverses the Examiner's rejection. Claim 12 is a system claim that includes two components, an organization structure generator component and a link manager component. The organization structure generator component is configured to generate an organization structure with nodes, and the link manager component is configured to generate links between business units in the organization structure and data. Applicant submits that such a system claim is drawn to statutory subject matter as either a machine or process, and is therefore tangible and limited to a practical application within the technological arts. Applicant thus respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §101.

On pages 5-12 of the Office Action, the Examiner rejected claims 1-24 under 35 U.S.C. §102(e) as being anticipated by Gervais et al., US Patent No. 6,381,579 (herein after "Gervais"). Applicant respectfully traverses the Examiner's rejection.

The present invention generates, or obtains, an organization structure that is indicative of the functional organization of business units within an organization. Then data

entities are linked to that structure with links, which are separate from the data entities themselves. Access to those data entities is controlled based upon how the data entities are linked to the organization structure. This addresses a wide variety of problems in present systems. For instance, most systems link data directly to users. However, when the organizational structure of an organization changes, or when users change, then the data records (or objects embodying the data) must all be modified to reflect any changes in users which are given access to that data. This is extremely cumbersome, time consuming, and costly.

The present invention addresses this problem by linking data to the organization structure. Then, users can be linked to, or unlinked from, the organization structure, as desired, and there is no need to update every object that embodies data (i.e., every entity) because the objects themselves do not define who has access to them. Instead, how the objects are linked to the organization structure defines who has access to them.

Gervais appears to be nothing more than a prior system discussed in the background portion of the present application. It appears that Gervais directly links data to users. Therefore, if the users of data change, or if an organizational structure of an organization changes, the data objects, which include corresponding links to users, must be updated to reflect changes in user access to the data. There does not appear to be any teaching, whatsoever, in Gervais of first obtaining or generating an organizational structure that reflects the structure of business units within an organization, and then linking data to that structure. This is simply absent from Gervais. Instead, Gervais links data directly to users.

More specifically, for each data object that is created, Gervais also creates a user list that identifies users that have access to that data, and the user list identifies whether the user has read only access or read/write access. See, for example, column 7, line 62-column 8, line 7. Gervais also specifically states "each entity in the system hierarchy of containers and resources has both a group of users and a group of managers. The user group has read access to the entity and the management group has read/write authority to the entity." Column 9, lines 62-66. This is specifically accomplished by providing different fields within the data object that include the name of the users. For instance, Gervais specifically states "each document in Lotus Notes is

allowed to have Reader and Author name fields. These fields determine who can read and edit the document, respectively. The fields can contain either individual user names or collections of users which are stored in group documents in the NAB. If a user's name does not appear in the Reader names field, then that document will not appear to the user through a Lotus Notes Domino web interface." Column 10, lines 6-13.

It is thus clear that Gervais is directed to a prior system which is described in the background of the present application. Gervais specifically provides access links directly between users and data. In contrast, claim 1 of the present invention includes "obtaining organization structure information indicative of an organization structure of business units based on functions performed by the business units and the organization; obtaining data entity information indicative of data entities that represent the data related to the organization; generating links, separate from the data entities, linking the data entities to the business units in the organization structure; and controlling user access to the data entities based on the links." This is a fundamentally different type of system than that set out in Gervais and overcomes certain disadvantages associated with directly linking users with data. Thus, Applicant submits that independent claim 1 is allowable over Gervais.

Similarly, independent claim 12 includes an organization structure generator component that is configured "to generate the organization structure with a plurality of nodes, each node representing a business unit of the organization; and a link manager component, configured to generate a link between a given business unit of the organization represented by a given node in the organization structure and an entity representative of data corresponding to the organization." Gervais is completely silent as to generating an organization structure, as claimed in claim 12, and as to generating links between data entities and the organization structure. Thus, Applicant submits that independent claim 12 is allowable as well.

Finally, independent claim 19 claims a data structure used in filtering access to business data entities representative of business data related to a business organization. The data structure includes a tree, stored on a computer readable medium, and is "indicative of a tree structure comprised of connected nodes, each node in the tree structure representing a functional

business unit of the organization and configured to include filter links, the filter links each identifying a business data entity that is linked to the functional business unit of the organization represented by the node containing the link." Gervais is silent as to teaching such a tree structure. There is simply no indication in Gervais that a tree structure includes connected nodes, each of which represent a functional business unit of an organization. Similarly, there is no notion in Gervais of filter links, each identifying a business data entity that is linked to a functional business unit in the organization represented by the node containing the link. Since this is completely missing from Gervais, Applicant submits that independent claim 19 is allowable as well.

A number of dependent claims are independently allowable. For instance, in one embodiment, user access to the data is controlled based on what role a user has within the organization. Therefore, not only does the present system link data to the organization structure, but it also links user roles to the organization structure. The access to data is controlled by assigning users of the system a user role. The user can then have access to the data to which the user role is connected through the organization structure. This is set out more specifically in dependent claims 5-7, and dependent claims 14-16. Thus, Applicant submits that these claims are independently allowable.

In another embodiment, the present system also deals with modifications to the organization tree structure, once it is generated. When the tree structure is changed, links to the tree structure are modified by automatically transferring the links from nodes affected by the change to the tree structure to other nodes in the tree structure. Since Gervais completely fails to teach or suggest obtaining or generating a tree structure indicative of an organizational structure of an organization, it cannot teach or suggest modifying the tree structure and then automatically transferring links among nodes in the tree structure based on the modification. Yet this is more specifically set out in dependent claims 9-11 and 17-18. Therefore, Applicant submits that these claims are independently allowable as well.

In conclusion, Applicant submits that claims 1-24 are allowable over Gervais. Reconsideration and allowance of those claims are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

WESTMAN, CHAMPLIN & KELLY, P.A.

By: _____

Joseph R. Kelly, Reg. No. 34,847
900 Second Avenue South, Suite 1400
Minneapolis, Minnesota 55402-3319
Phone: (612) 334-3222 Fax: (612) 334-3312

JRK:slg